#### REMARKS

### The Pending Claims

Claims 1-7 are pending currently. Claims 1-7 are directed to direct-to-plate methods of lithographic printing with a reusable substrate having a hydrophilic surface.

#### The Amendments

#### i) To the Specification

The specification has been amended to correct the form with respect to the use of trademarks. As well, informalities, as identified by the Office, have been corrected. No new matter has been added by way of these amendments.

#### ii) To the Claims

The claims have been amended to point out more particularly and claim more distinctly the subject matter of the invention. In particular, claim 1 has been amended to provide proper antecedent basis for "the refreshing liquid" of claim 7. Support for the amendment can be found at, e.g., page 5, line 19 of the application. In addition, claim 7 has been amended to recite "the ink and fountain solution" so as to be consistent with claim 1. No new matter has been added by way of these amendments.

A separate document setting forth the precise changes to the claims is enclosed herewith.

#### Summary of Office Action

The Office Action objects to the specification for use of informalities as well as use of improper format in reciting trademarks. The Office Action further objects to claim 7 under 37 C.F.R. § 1.75 (a) as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office contends it is not clear which solution "the solution" of claim 7 is referring back to, and "the refreshing liquid" of claim 7 lacks proper antecedent basis. Finally, the Office rejects claims 1-7 as allegedly unpatentable under 35 U.S.C. § 103 (a) over Vermeersch et al. (EP 802,457) (hereinafter "Vermeersch") in view of Walls et al. (U.S. Patent No. 4,880,555) (hereinafter "Walls").

Discussion of the Objections to the Specification

In view of the amendments to the specification, the objections to the specification are moot.

Discussion of the Rejections under 37 C.F.R. § 1.75 (a)

Claim 1 has been amended to provide antecedent basis for the "refreshing liquid" of claim 7. Further, claim 7 has been amended to make clear that the "solution" recited in the original claim is the "ink and fountain solution" of claim 1. In view of the amendments to claims 1 and 7, the rejection of the claims is moot.

### Discussion of the Obviousness Rejection

The obviousness rejection is not believed to be proper inasmuch as the cited references (i.e., Vermeersch and Walls) neither disclose nor reasonably suggest the present inventive methods.

The Office, in support of its position, contends that Vermeersch discloses the method as recited except for the step of treating the recycled substrate with an aqueous acid solution. (Office Action, page 2). Further, the Office alleges that Walls teaches the desirability of treating a substrate with an aqueous acid solution to increase the hydrophilicity of the substrate. (Office Action, page 3). The Office then combines these teachings and concludes "[i]t would have been obvious to one of ordinary skill in the art to provide the method of Vermeersch et al. with the step of treating the recycled substrate with an aqueous acid solution in view of Walls et al. so as to increase the hydrophilicity of the bare substrate and reduce scumming." (Office Action, page 3).

Applicants agree with the Office that Vermeersch teaches the method as recited with the exception of treating the recycled substrate with an aqueous solution having a pH<7 (hereinafter "aqueous acid solution"). However, Applicants disagree with the Office that Walls fills in that which Vermeersch fails to teach to sustain a prior art rejection under 35 U.S.C. § 103.

# i) Walls is non-analogous art and is, therefore, an improper basis for a prior art rejection under 35 U.S.C. § 103

For a reference to be considered prior art under 35 U.S.C. § 103, the reference must be analogous prior art. MPEP § 2141.01 (a). In considering what is analogous prior art, the relevant inquiry is into "the similarities and differences in structure and function of the inventions" is the relevant inquiry. *In re Ellis*, 476 F.2d 1370, 1372, 177 U.S.P.Q. (BNA) 526, 527 (C.C.P.A. 1973); MPEP § 2141.01 (a). Here, Walls the differences in structure and function of the inventions is such that Walls is not analogous art.

The compositions described by Walls do not have the same function as the aqueous acid solution of the present invention. The compositions of Walls are used in the finishing, preserving and cleaning of lithographic printing plates (col. 4, lines 63-65). However, Walls does not disclose the concept of reusable substrates. What Walls does describe is the use of emulsions to treat contamination, fingerprints, scratches, etc. of printing plates which are oil sensitive and result in background stains upon printing (col. 2, lines 20-26). In addition, the finishing, cleaning and preserving solutions of Walls must prevent blinding of the image areas (col. 2, lines 8-11). Thus, Walls is devoid of any teaching of treating recycled substrates to make them more hydrophilic as disclosed in the present application. As such, the *function* of the Walls compositions differs markedly from that of the refreshing liquid consisting of an aqueous acid solution of the present invention.

Furthermore, the *emulsions* of Walls are structurally different from the *aqueous* acid solutions employed in the present invention. It is well known in the art that, for the purposes of cleaning, *emulsions* consist of a solvent phase and an aqueous phase. Principally, the solvent phase dissolves greasy ink built up on the plate and the aqueous phase dissolves deposits on the non-image areas to restore hydrophilicity to the background areas (col. 2, lines 42-50). Walls teaches a stable *emulsion* comprising six ingredients (col. 2, line 64 to col. 3, line 36). The claims of the present invention, as amended, makes use of a "refreshing liquid" consisting of an aqueous acid solution. As such, the compositions of Walls and the composition employed by the present invention are *structurally* different.

In view of the functional and structural differences between the emulsions of Walls and the refreshing liquid consisting of an aqueous acid solution of the present invention, Walls is non-analogous art. As such Walls is an improper basis on which to base a rejection under 35 U.S.C. § 103.

# ii) Walls neither teaches nor suggests the step of treating the recycled substrate with an aqueous acidic solution

Even if the Office were to consider Walls analogous art, Walls neither teaches nor suggests the step of treating a recycled substrate with a refreshing liquid consisting of an aqueous acid solution. All the claim limitations must be taught or suggest by the prior art to establish *prima facie* obviousness of a claimed invention. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. (BNA) 580 (C.C.P.A. 1974), MPEP § 2143.03. Walls does not provide any teaching or suggestion of the missing step of treating a reusable substrate with a refreshing liquid consisting of an aqueous acid solution to cure the shortcomings of Vermeersch so as to render the claimed invention obvious over the combined teachings of the referenes.

References relied upon as a basis for an obviousness rejection under 35 U.S.C. § 103 must be considered as a whole. *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 U.S.P.Q. (BNA) 182, 187 n.5 (Fed. Cir. 1986); MPEP § 2141. As described above, Walls only describes the use of cleaning *emulsions* to treat contamination, fingerprints, scratches, etc. of printing plates which are oil sensitive and result in background stains upon printing. See, e.g., col. 2, lines 56-61; col. 2, lines 64-66; col. 4, lines 2-4; col. 4, lines 11-14; col. 5, lines 29-31; col. 5, lines 60-63; and col. 6, lines 18-20. To the extent that Walls discloses acidic cleaning compositions, *taken as a whole*, Walls is limited to the description of acidic cleaning *emulsions*. As already discussed, *emulsions* are compositionally distinguishable from the refreshing liquid consisting of an aqueous acid solution, as claimed in the present invention. Therefore, Walls does not provide a teaching or suggestion of the relevant to the step at issue: the treating of a recycled substrate with a refreshing liquid consisting of an *aqueous acid solution*, as recited in the amended claims of the present invention. As such, even if the Walls reference is considered analogous art by the Office, the combined teachings of

Walls and Vermeersch still fail to teach or suggest each and every limitation of the

claimed invention.

Dependent claims 2-6 incorporate all the claim limitations of independent claim 1,

which, as discussed above, is patentable over the combination of Vermeersch and Walls.

For this reason, the dependent claims are also patentable over Vermeersch and Walls.

In view of the foregoing, Vermeersch in view of Walls, cannot be said to teach or

fairly suggest the claimed invention. Accordingly, the obviousness rejection should be

withdrawn and the application allowed.

Conclusion

The application is considered in good and proper form for allowance, and the

Examiner is respectfully requested to pass this application to issue. If, in the opinion of the

Examiner, a telephone conference would expedite the prosecution of the subject application,

the Examiner is invited to call the undersigned attorney.

Respectfully submitted

Salim A. Hasan, Reg. No. 38,175

LEYDIG, VOIT & MAYER, LTD.

Two Prudential Plaza, Suite 4900

180 North Stetson

Chicago, Illinois 60601-6780

(312) 616-5600 (telephone)

(312) 616-5700 (facsimile)

Date: June 13, 2003

M:\Clients\Agfa Gevaert\U.S. Prosecution\Amendments\214598amd.DOC

7

## Certificate of Mailing Under 37 CFR 1.10

I hereby certify that this AMENDMENT (along with any documents referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Date: 4/13/03 Virgnia Sclutte